

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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BRAINWAVE SCIENCE, INC.

Plaintiff,

- against -

21-cv-4402 (BMC)

ARSHEE, INC., DR. LAWRENCE A.
FARWELL, DR. THIERRY MAISON and
BRAIN FINGERPRINTING FOUNDATION

Defendants.

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**PLAINTIFF'S MEMORANDUM OF LAW IN SUPPORT OF
ORDER TO SHOW CAUSE FOR A TEMPORARY INJUNCTION**

Dated: New York, New York
November 2, 2021

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PRELIMINARY STATEMENT AND STATEMENT OF FACTS

Plaintiff Brainwave Science, Inc (BWS) is a small (under ten employees) company in the business of developing and marketing a technology (iCognitive®) which, by measurement of “P300” brainwaves, allows investigators to ascertain whether particular information is or is not present within a test subject’s mind. (See November 1, 2021 Affidavit of Krishna Ika, President and Chief Executive Officer of Brainwave Science, Inc. (“Ika”) at 2, ¶3). BWS’ business model involves sale of its systems by way of bids or “tenders” or “RFPs” with international government agencies and vendors. (Ika at 7, ¶24).

In or about April of 2021, BWS submitted a bid to a Bangladeshi government agency for sale of its iCognitive® system. BWS thereafter learned that a competing bid for a P300-related system had been submitted by former BWS employee Dr. Lawrence A. Farwell (“Farwell”) in conjunction with Defendant Arshee, Inc. (“Arshee”), Defendant Brain Fingerprinting Foundation (“BFF”) and non-party Bangladeshi company Tracer Electrocom (“Tracer”). (Ika at 6, ¶17). Farwell had served as the Chief Scientific Officer for BWS’ predecessor in interest, Brainwave Science, LLC (“BWS, LLC”). (Ika at 2, ¶4)

BWS subsequently received unconfirmed reports that the user interface utilized by BFF’s, Farwell’s and Arshee’s product was identical to the interface designed by BWS’ former Chief Technology Officer, Defendant Dr. Thierry Maison (“Maison”) during Maison’s employment with Brainwave. (Ika at 6, ¶18). Maison, who had served as the Chief Architect for BWS’ iCognitive® System, had been employed as the Chief Technology Officer for BWS and BWS, LLC from June 2013 to February 2019. (Ika 3, ¶8). During his employment with BWS, LLC and BWS, Maison led BWS’ development team’s efforts in designing, managing and refining the algorithms used by their system. (Ika 3, ¶8).

Within their subsequent investigation, BWS' technology team members located an online demonstration video wherein Farwell is depicted demonstrating a system with a nearly identical user interface to that designed by Maison for BWS. (Ika at 6, ¶19 and Ika Exhibit B). BWS thereafter confronted Maison regarding their suspicion that Maison had provided Farwell with copies of their proprietary software code, user interfaces, algorithms and hardware ("Brainwave Trade Secrets"). Maison admitted to, and provided evidence of, his transfer of the Brainwave Trade Secrets to Farwell. Maison admitted that "a complete dump of the repository was created and shared via a Google drive" with Farwell. Maison provided access to the Google drive used by him to share the afore-referenced code with Farwell. (Ika at 6, ¶20 and Ika Exhibit E). Farwell's plagiarism of BWS' proprietary software code, user interfaces and algorithms was subsequently confirmed by "Code Similarity Checker", Codequiry®. Codequiry®'s analysis indicates a 98-99% likelihood of "plagiarism" by Farwell's software. (Ika Page 7, ¶22-23 and Ika Exhibit C).

Following its receipt of bids containing nearly identical software and user interfaces from Defendants and BWS, the afore-referenced Bangladeshi agency elected not to do business with either BWS or Defendants. In addition to the loss of economic opportunity, this has resulted in a significant impairment of BWS' goodwill and potential for future business opportunities with the agency and other agencies within Bangladesh. It has also understandably caused substantial frustration on the part of BWS' Bangladeshi sales partner, who expended substantial resources, and extended its own goodwill, in coordinating BWS' bid with the agency. (Ika at 8, ¶26).

BWS has recently been advised by its local sales partner of an upcoming tender with another Bangladeshi agency for sale of a P300 system and that Arshee will again be participating in the tender process. (Ika at 8, ¶ 27). Absent intervention by this Court, BWS and its Bangladeshi sales partner will necessarily sustain additional immediate and irreparable impairment to their

respective goodwill with the Bangladeshi government and other international governments and agencies.

ARGUMENT

Injunctive relief is appropriate where the party seeking the injunction shows "(a) irreparable harm and (b) either (1) likelihood of success on the merits or (2) sufficiently serious questions going to the merits to make them a fair ground for litigation and a balance of hardships tipping decidedly toward the party requesting the preliminary relief." *Citigroup Glob. Mkts., Inc. v. VCG Special Opportunities Master Fund Ltd*, 598 F.3d 30, 35 (2d Cir. 2010) (quoting *Jackson Dairy, Inc. v. HP. Hood & Sons, Inc.*, 596 F.2d 70, 72 (2d Cir. 1979)). For the reasons set forth below, BWS has satisfied these requirements, as well as those required for relief under the Defend Trade Secrets Act (18 U.S.C. § 1832 et seq.) ("DTSA") and should be granted a temporary injunction as outlined herein.

I. BWS Will Continue to Suffer Irreparable Harm if this Court Does Not Grant Injunctive Relief

BWS will continue to suffer irreparable harm if this Court does not grant injunctive relief. Courts in this Circuit have long acknowledged that "[p]erhaps the single most important prerequisite for the issuance of a preliminary injunction is a demonstration that if it were not granted the applicant is likely to suffer irreparable harm before a decision on the merits can be granted." *Payment All. Int'l, v. Ferreira*, 530 F. Supp. 2d 477, 480 (S.D.N.Y. 2007) (citation omitted). To satisfy this requirement, BWS must show that it will suffer "'an injury that is neither remote nor speculative, but actual and imminent,' and one that cannot be redressed through a monetary award." *Id.* (quoting *Grand River Enter. Six Nations, Ltd. v. Pryor*, 481 F.3d 60, 66 (2d Cir. 2007)). Appropriately-tailored injunctions can be useful to protect plaintiffs from the effects

of misappropriated trade secrets. *See generally Id. and Faiveley Transp. Malmo AB v. Wabtec Corp.*, 559 F.3d 110, 119 (2d Cir. 2009).

Here, injunctive relief is necessary to prevent further unlawful dissemination and distribution of BWS' proprietary software code, user interfaces, algorithms and hardware ("Brainwave Trade Secrets"). BWS' proprietary software code, user interfaces, algorithms and hardware are the very information upon which BWS' business is based. Furthermore, although BWS' damages associated with losing its trade secrets would alone be incalculable, Defendants are also inflicting irreparable harm to BWS' business relationships and damaging its goodwill. "[P]rospective loss of goodwill alone is sufficient to support a finding of irreparable harm." *Bulman. V. 2BKCO, Inc.*, 882 F.Supp.2d 551, 560 (S.D.N.Y., 2012).

II. Plaintiff is Likely to Succeed on the Merits of Its Defense of Trade Secrets Claims.

Brainwave asserts claims for Defendants' misappropriation of Brainwave's Trade Secrets. Pursuant to the Federal Defend Trade Secret Act ("DTSA"), a private right of action may be brought for misappropriation of trade secrets related to a product or service used or intended for use in interstate commerce. 18 U.S.C. §§ 1832, 1836. In relevant part, the statute imposes liability on a person who, (1) "with intent to convert a trade secret ... to the economic benefit of anyone other than the owner thereof" and (2) "intending or knowing that the offense will[] injure any owner of that trade secret," and (3) "without authorization," (4) takes, conceals, copies, duplicates, downloads, uploads, replicates, transmits, delivers, sends, or conveys the trade secret. 18 U.S.C. § 1832.

A. BWS' proprietary software code, user interfaces and algorithms are Trade Secrets.

Under DTSA, a trade secret can take many forms and information, including, for example, financial, business, and technical information, programs, or codes, whether tangible or intangible. 18 U.S.C. § 1839(3). In all events, however, information will not be deemed a trade secret unless it meets two requirements: (1) the owner “has taken reasonable measures to keep such information secret,” and (2) “the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.” 18 U.S.C. § 1839(3)(A-B). BWS takes substantial measures to protect the secrecy of the proprietary software code, user interfaces, algorithms and hardware comprising the Brainwave Trade Secrets. These measures include utilizing secure cloud-based servers, visitor control systems, alarming/self-locking doors, twenty-four live security personnel and confidentiality and non-disclosure agreements with all employees, vendors and sales partners. (Ika at 5, ¶13). BWS also takes the unusual step of also requiring that all potential customers execute confidentiality and non-disclosure agreements prior to viewing or operating their system. (Ika at 5, ¶13).

BWS’ proprietary software code, user interfaces, algorithms and hardware clearly have “independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information”. Defendants themselves admit within their Answer that BWS’ “proprietary code and user interfaces”, which are the subject of this claim, were developed by Maison for BWS during his six years of employment with BWS (ECF 13 at ¶13). Defendants further admit within their Answer that “the proprietary system developed by Maison and BWS’ technology team successfully addressed a number of problems which had previously prevented the effective use of P300-related technology by field agents. (ECF 13 at ¶14).

Defendants admit and acknowledge that “the code/algorithms developed by Maison and the technology team eliminated “noise” which could provide false positive or negative responses. (ECF 13 at ¶14).

In defense of their claimed violation of the DTSA, Defendants assert that “P300 Brainwave is not a trade secret.” (ECF 13 at ¶43).. This assertion, while correct, misses the point entirely. As set forth within BWS’ Complaint, the concept of using P300 measurements to determine the presence or absence of information within a subject’s brain is not proprietary to BWS. (ECF 1 at 11); Ika at 3, ¶9). However, as with many new or emerging scientific innovations, the challenge in bringing P300 technology to market lies not within the underlying concept but in creating a mechanism or system which allows a user to access and utilize the concept appropriately and without years of training or technical expertise. BWS has developed its own P-300 based system (“iCognitive®”) which, by use of the Brainwave Trade Secrets:

- a) prompts testing personnel for appropriate stimuli;
- b) displays stimuli to testing subjects in optimal order and at optimal intervals;
- c) captures appropriate P300 brainwave responses;
- d) disregards and/or eliminates extraneous responses (“noise”) which may produce false positive or false negative results;
- e) detects and disregards any attempted countermeasures by suspects or others involved in conducting testing;
- f) performs appropriate analysis of P300 measured responses utilizing statistical and machine learning algorithms and Artificial Intelligence and
- g) generates unbiased reports for use by examiners, investigating agencies and legal authorities (Ika at 4, ¶10).

It is clear that the Brainwave Trade Secrets constitute trade secrets as defined by DTSA. BWS has taken reasonable measures to keep its software code, user interfaces, algorithms and hardware secret and that said software code, user interfaces, algorithms and hardware derive independent economic value, actual or potential, from not being generally known to, and not being

readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.

B. Defendants have violated the Defend Trade Secrets Act.

The Defend Trade Secrets Act provides, in relevant part that, “An owner of a trade secret that is **misappropriated** may bring a civil action under this subsection if the trade secret is related to a product or service used in, or intended for use in, interstate or foreign commerce.” 18 U.S.C. § 1836(b)(1) (emphasis added). The term “misappropriation” includes, in relevant part, disclosure or use of a trade secret of another without express or implied consent by a person who—

(ii) at the time of disclosure or use, knew or had reason to know that the knowledge of the trade secret was—

(I) derived from or through a person who had used improper means to acquire the trade secret;

(II) acquired under circumstances giving rise to a duty to maintain the secrecy of the trade secret or limit the use of the trade secret; or

(III) derived from or through a person who owed a duty to the person seeking relief to maintain the secrecy of the trade secret or limit the use of the trade secret; 18 U.S.C. § 1839(5)(B)(ii)(I-III).

Defendant Maison has admitted to, and provided evidence of, his transfer of BWS’ proprietary files and code to Farwell and BFF (Ika at 6, ¶20 and Ika Exhibit E). Within his email correspondence of June 28, 2021, Defendant Maison, upon being confronted by BWS. admitted that “a complete dump of the repository [containing BWS’ proprietary P300 code] was created and shared via a Google drive” with Farwell. (Ika at 6, ¶20 and Ika Exhibit E). A subsequent analysis by Code Similarity Checker, Codequiry®, indicates a 98-99% likelihood of

“plagiarism” by Farwell’s software. (Ika at 7, ¶22 and Ika Exhibit C).

As a result of Defendants’ use of stolen code from BWS, the user interfaces of Farwell's "Brain Fingerprinting" software are also nearly identical to the interfaces designed and implemented by Maison during his employment with Brainwave. As illustrated by a side-by-side comparison of the user interfaces, the system layout, fields, user prompts, tabs and overall presentation are nearly identical. (Ika at 7, ¶23 and Ika Exhibit D). Defendants’ brazen implementation of BWS’ proprietary code within their own system is further evinced by their system’s near-verbatim copying of the instructions provided to users of the system. (See Ika Exhibit D, Page 9, “Perform Analysis”).

Maison certainly knew at the time of these disclosures that the material disclosed had been “acquired under circumstances giving rise to a duty to maintain the secrecy of the trade secret or limit the use of the trade secret.” 18 U.S.C. § 1839(5)(B)(ii)(II). Defendants Admit within their Answer that, at the inception of his employment, Maison executed Non-Disclosure and Confidentiality and Rights Agreements with BWS, providing that all inventions, "know-how" etc. developed by Maison in the course of his employment would remain the property of BWS. (ECF 13 at ¶16)¹. Defendants further Admit that, during the tenure of his employment with BWS,

Maison was given high-level access to a wide variety of BWS’ most confidential, proprietary, and trade secret information (“BWS Trade Secrets”). These BWS Trade Secrets include, but were not limited to, intellectual property related to BWS’ new and developmental products and operations information. Maison was given high-level access to this information for the sole purpose of discharging his responsibilities for BWS, LLC and BWS. (ECF 13 at ¶17)

¹ Defendants’ Admission is qualified by denying that the described information qualify as trade secrets.

Defendants further Admit that, at the conclusion of his employment in February of 2019, Maison executed a separation agreement with BWS whereupon Maison was paid substantial consideration in exchange for his acknowledgement of his continuing obligation(s) to comply with the terms of the afore-referenced Employment Agreement, Non-Disclosure and Non-Competition Agreement and Confidentiality and Rights Agreements. (ECF 13 at ¶18)

Maison's disclosures of the Brainwave Trade Secrets to his Co-Defendants likewise constitute clear violations of the DTSA as the Trade Secrets had been acquired [by Maison] under circumstances giving rise to a duty to maintain the secrecy of the trade secret or limit the use of the trade secret." 18 U.S.C. § 1839(5)(B)(ii)(II). Maison's co-defendants receipt of the Trade Secrets likewise constate violations of the DTSA as they were "derived from or through a person [Maison] who owed a duty to the person [BWS] seeking relief to maintain the secrecy of the trade secret or limit the use of the trade secret. 18 U.S.C. § 1839(5)(B)(ii)(III).

III. The Balance of Equities weighs in favor of Plaintiff's Narrow Request for Relief.

Injunctions are typically warranted only where the balance of equities tips in the moving party's favor. *See Winter v. Nat. Res. Def Council, Inc.*, 129 S.Ct. 365, 375 (2008). As set forth herein, the continuing and imminent harm caused by Defendants' misappropriation of Plaintiff's Trade Secrets is incalculable - both in terms of Plaintiff's continued business operations and Plaintiff's goodwill. In contrast, the relief proposed by Plaintiff's present application is

narrowly tailored to avoid undue hardship upon Defendants while preventing further dissemination of the Brainwave Trade Secrets pending final resolution of this claim. Plaintiff is requesting that this Court issue an order (1) enjoining Defendants from the unauthorized possession, use, or disclosure of the Brainwave Trade Secrets; (2) directing Defendants to provide Brainwave with the names and contact information of all persons and entities with whom Defendants have disclosed the Brainwave Trade Secrets; (3) directing Defendants to recall all software embodying the Brainwave Trade Secrets and 4) requiring Defendants, prior to demonstrating, selling or transferring any P300-related software, to obtain independent third-party confirmation, at Plaintiff's sole expense, that the software does not include any Brainwave Trade Secrets. Given the balance of equities between Plaintiff and Defendants, it is respectfully submitted that this proposed relief is both eminently reasonable and fair.

Wherefore, based upon the foregoing, Plaintiff respectfully requests that this Court grant Plaintiff the relief requested within its Order to Show Cause with such other and further relief as the Court may deem just and proper.

Respectfully,

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